Official

FILED VIA FACSIMILE TRANSMISSION

PATENT APPLICATION
Docket No. 13768.119

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

7-2-03

In re application of	Alexander I. Hopmann, et al.	
Serial No.:	09/412,738	Art Unit 2157
Conf No.:	1043	
Filed:	October 4, 1999	
For:	SYSTEMS AND METHODS FOR DETECTING AND RESOLVING RESOURCE CONFLICTS	
Examiner:	Dustin Nguyen	

VERIFIED STATEMENT OF ADRIAN J. LEE

Assistant Commissioner for Patents
Alexandria, VA 22313-1450

Adrian J. Lee declares:

1. I am an Attorney of Record for the Applicants in the above-identified application.

2. On January 17, 2003, I held an Examiner Interview with the Examiner regarding the Office Action dated November 5, 2002. In the Examiner Interview, a facsimile number was provided for use when filing the amendment that was prepared based upon the Examiner Interview. The Office Action itself does not provide a facsimile number that may be used for filing amendments.

3. On January 21, 2003, I instructed my assistant to transmit by facsimile Amendment A using the number provided. Later, my assistant reported that she had facsimile transmitted Amendment A using the number provided, that the Examiner indicated that he had not received the transmission, and that the Examiner provided a second facsimile number to be used to transmit the amendment.

4. I then instructed my assistant to facsimile transmit Amendment A and corresponding documents (including a Facsimile Cover Sheet and a Certificate of Facsimile

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

Transmission) to the second number provided, and to be sure that the transmission was completed on January 21, 2003. Our internal facsimile machine generated a successful transaction report indicating that all 20 pages of the transmission had been received. My assistant reported to me that the Examiner also verbally confirmed receipt of the transmission. Amendment A and the corresponding documents are included as Exhibits A, B and C. Exhibit A includes the Facsimile Cover Sheet and Transmittal Letter, Exhibit B includes the Certificate of Facsimile Transmission, and Exhibit C includes Amendment A. The successful transaction receipt is included as Exhibit D.

5. Exhibits A through C are true copies of documents transmitted on January 21, 2003. Exhibit D is a true copy of the resulting successful transaction report.

6. On June 19, 2003, one of our paralegals, Ms. Holt, informed me that the Examiner had called on June 13, 2003 to inquire as to whether an amendment had been filed. She informed me that she had told the Examiner that we had filed Amendment A via facsimile on January 21, 2003, and that she had sent copies of the successful transaction receipt as well as all of the documents previously transmitted on January 21, 2003 (as represented in Exhibits A through D) to the Examiner. I called the Examiner on June 19, 2003 to confirm that the Examiner did indeed receive the documents.

7. I further declare that all statements made of my own knowledge are true and all statements made on information and belief are believed to be true; and, further, that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that such willful, false statements may jeopardize the validity of the application or document or any registration resulting therefrom.

Dated and signed this 2nd day of July, 2003

By: _____

ADRIAN J. LEE
Attorney for Applicants
Registration No. 42,785

022913

PATENT TRADEMARK OFFICE

W:\13768\119\AJL0000000248V001.DOC

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

EXHIBIT A

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

WORKMAN, NYDEGGER & SEELEY
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111
TELEPHONE (801) 533-9800
FAX (801) 328-1707

TELECOPIER COVER SHEET

January 21, 2003

Total Number of Pages
(including cover letter): 20

Please deliver the transmitted facsimile pages to:

EXAMINER DUSTIN NGUYEN

Business Phone (703) 305-5321

Telecopier Phone: (703) 746-8709

From: Dee So for ADRIAN J. LEE

Comments: Please see attached Amendment "A" for filing in U.S. Serial No.: 09/412,738

Docket No.: 13768.119

****

We are transmitting from a Sharp FO-750 or Sharp FO-6100 facsimile machine. If you do not receive all the pages or they are unreadable, please contact me as soon as possible at (801) 533-9800.

THE INFORMATION CONTAINED IN THIS FACSIMILE MESSAGE IS ATTORNEY PRIVILEGED AND CONFIDENTIAL INFORMATION INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY NAMED ABOVE. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, OR THE EMPLOYEE OR AGENT RESPONSIBLE TO DELIVER IT TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE IMMEDIATELY NOTIFY US BY TELEPHONE, AND RETURN THE ORIGINAL MESSAGE TO US AT THE ABOVE ADDRESS VIA THE U.S. POSTAL SERVICE. THANK YOU.

CONFIRMATION COPY WITH ENCLOSURES SENT BY:
U.S. MAIL / FEDERAL EXPRESS / OTHER YES___ NO__X__

W:\13768\119\DMS0000001950V001.doc

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

WORKMAN NYDEGGER & SEELEY
ATTORNEYS AT LAW
A PROFESSIONAL CORPORATION
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111
TELEPHONE (801) 533-9800
FACSIMILE (801) 328-1707

RICK D. NYDEGGER
DAVID O. SEELEY
BRENT P. LORIMER
THOMAS R. VUKSINICK
LARRY R. LAYCOCK
JONATHAN W. RICHARDS
DAVID R. WRIGHT
JOHN C. STRINGHAM
JOHN M. GUYNN
CHARLES L. ROBERTS
GREGORY M. TAYLOR
DANA L. TANGREN
ERIC L. MASCHOFF
CHARLES J. VEVERKA
ROBYN L. PHILLIPS
RICHARD C. GILMORE†
DAVID B. DELLENBACH
R. BURNS ISRAELSEN
DAVID R. TODD
L. DAVID GRIFFIN

JESÚS JUANÓS I TIMONEDA, Ph.D.
ADRIAN J. LEE
FRASER D. ROY
CARL T. REED
R. PARRISH FREEMAN, JR.
PETER F. MALEN, JR.
L. REX SEARS, Ph.D.
ERIC M. KAMERATH
ROBERT E. AYCOCK
JENS C. JENKINS
KEVIN W. STINGER
WILLIAM J. ATHAY
MICHAEL B. DODD
WILLIAM R. RICHTER
TRENT I. BAKER
RYAN D. BENSON
SARA D. JONES
TIGE KELLER

† ADMITTED ONLY IN CALIFORNIA

PATENTS
TRADEMARKS
COPYRIGHTS
TRADE SECRETS
UNFAIR COMPETITION
LICENSING
COMPLEX LITIGATION

MAILING ADDRESS:
P.O. BOX 45802
SALT LAKE CITY, UT 84145

INTERNET
HOME PAGE: http://www.wnspatent.com
GENERAL E-MAIL: info@wnspatent.com

FILED VIA FACSIMILE

PATENT APPLICATION
Docket No: 13768.119

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	Alexander I. Hopmann, et al.	
Serial No:	09/412,738	Art Unit 2157
Filed:	October 4, 1999	
Confirmation No.:	1043	
For:	SYSTEMS AND METHODS FOR DETECTING AND RESOLVING RESOURCE CONFLICTS	
Examiner:	Dustin Nguyen	

Official
RECEIVED 7-2-03

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Transmitted herewith is an amendment for entry in the above-identified application.

X No additional fee is required.

X Triplicate copies of this sheet are attached.

___ Small entity status of this application under 37 CFR 1.9 and 1.27 has been established by a verified statement previously submitted.

___ Petition for ____ Month Extension of Time under 37 CFR 1.17 with Check No. _____ in the amount of _____.

___ Terminal Disclaimer and Check No. _____ in the amount of $110.00.

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

___ No additional fee is required.

___ Triplicate copies of this sheet are attached.

The fee has been calculated as follows.

			SMALL ENTITY		LARGE ENTITY	
CLAIMS REMAINING AFTER	HIGHEST NO. PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDT'L FEE	RATE	ADDT'L FEE
TOTAL	MINUS = 43	=	X9		X18	
INDEPENDENT	MINUS = 6	=	X42		X84	
1ST PRESENTATION OF MULTIPLE DEPENDENT CLAIM			+140=		+280=	
			TOTAL		TOTAL	

___ Please charge my Deposit Account No. 23-3178 in the amount of _____. Triplicate copies of this sheet are attached.

___ A check in the amount of $_____ is enclosed.

X The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 23-3178. Triplicate copies of this sheet are attached.

X Any filing fees under 37 CFR 1.16 for the presentation of extra claims.

X Any patent application processing fees under 37 CFR 1.17.

X Any fees for filing a terminal disclaimer under 37 CFR §§ 1.321(c) and 1.20(d).

Dated this 21st day of January, 2003.

Respectfully submitted,

ADRIAN J. LEE
Attorney for Applicant
Registration No. 42,785

022913

PATENT TRADEMARK OFFICE

AJL:ds
W:\13768\119\DS0000000221V001.doc

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

EXHIBIT B

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

FILED VIA FACSIMILE

PATENT APPLICATION
Docket: 13768.119

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Official
RECEIVED
1203

In re application of	Alexander I. Hopmann, et al.	
Serial No.:	09/412,738	Art Unit 2157
Filed:	October 4, 1999	
Confirmation No.:	1043	
For:	SYSTEMS AND METHODS FOR DETECTING AND RESOLVING RESOURCE CONFLICTS	
Examiner:	Dustin Nguyen	

CERTIFICATE OF FACSIMILE TRANSMISSION

Assistant Commissioner for Patents
Washington, D. C. 20231

Sir:

I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office on the date shown below.

- Transmittal Letter (2 pages)
- Amendment "A" and Response (16 pages)
- Certificate of Facsimile Transmission

Dated this 21st of January, 2003.

Respectfully submitted,

ADRIAN J. LEE
Attorney for Applicant
Registration No. 42,785

022913

PATENT TRADEMARK OFFICE

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

EXHIBIT C

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

FILED VIA FACSIMILE

PATENT APPLICATION
Docket No. 13768.119

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Official
RECEIVED
1-2-03

In re application of	Alexander Hopmann, et al.	
Serial No.:	09/412,738	Art Unit 2157
Filed:	October 4, 1999	
For:	SYSTEMS AND METHODS FOR DETECTING AND RESOLVING RESOURCE CONFLICTS	
Examiner:	Dustin Nguyen	

AMENDMENT "A" and RESPONSE

Box RESPONSES
NO FEE
Assistant Commissioner for Patents
Washington, DC 20231

Dear Sir:

Responsive to the Office Action dated November 5, 2002 (paper No. 7), Applicant respectfully requests entry of the following amendments and reconsideration of the pending claims in view of the matters discussed at the Examiner Interview of January 17, 2003, and the further remarks herein.

In the Claims:

Please cancel claim 15 without prejudice.

Please amend claims 1, 10, 17, 30, 34, 35, 40, 42 and 43 as follows:[1]

[1] For the Examiner's convenience, claims that are not amended in this response are also included in this section in small type.

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

1. (Amended) In a system capable of replicating a server copy of a resource stored on one or more servers with a client copy of the resource stored on one or more clients, a method for resolving a resource conflict comprising the steps of:

detecting, by the server, that the resource on the server conflicts with the copy of the resource on a client;

determining, at the server, whether the server can resolve the conflict between the resource and the copy of the resource into a single version of the resource;

creating, by the server, a conflict resource, if the conflict cannot be resolved at the server;

evaluating, at the client, whether the conflict resource can be resolved into a single version of the resource in accordance with a schema of the client if the conflict was not resolved at the server; and

presenting the conflict resource to a user if the conflict resource cannot be resolved by the client.

2. (Unamended) A method as defined in claim 1, wherein the step of detecting further comprises the step of comparing a client resource tag, provided by the client, with a server resource tag.

3. (Unamended) A method as defined in claim 2, wherein the client resource tag is representative of a version of the resource.

4. (Unamended) A method as defined in claim 2, wherein the server resource tag is representative of a version of the resource.

5. (Unamended) A method as defined in claim 1, wherein the step of determining further comprises the step of resolving the conflict at the server.

6. (Unamended) A method as defined in claim 1, wherein the step of determining further comprises the step of comparing the client copy of the resource with the server copy of the resource.

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

7. (Unamended) A method as defined in claim 1, wherein the conflict resource comprises the server copy of the resource and the client copy of the resource.

8. (Unamended) A method as defined in claim 1, wherein the step of evaluating further comprises the step of resolving the conflict at the client in accordance with the schema.

9. (Unamended) A method as defined in claim 1, further comprising the steps of:

uploading the resolved conflict resource to the server; and

returning a new resource tag to the client from the server.

10. (Amended) In a system having multiple copies of a resource, a method for detecting and resolving a conflict between a client copy of the resource and a server copy of the resource, the method comprising the steps of:

receiving, from the client, a client resource tag at the server, wherein the client resource tag identifies a client version of the client copy of the resource;

determining, by the server, whether the client resource tag matches the server resource tag, wherein the server resource tag identifies a server version of the server copy of the resource;

determining that a conflict exists if the client resource tag does not match the server resource tag; and

executing a server level of conflict resolution between the client copy of the resource and the server copy of the resource at the server in order to resolve the server copy and client copy of the resource into a single version of the resource.

11. (Unamended) A method as defined in claim 10, wherein the step of determining by the server further comprises the step of comparing the client resource tag with the server resource tag.

12. (Unamended) A method as defined in claim 10, wherein the client resource tag is transmitted to the server in a PUT method.

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

13. (Unamended) A method as defined in claim 10, further comprising the step of initiating the conflict detection from the client.

14. (Unamended) A method as defined in claim 10, wherein the step of executing a server level of conflict resolution further comprises the step of comparing the client copy of the resource with the server copy of the resource.

16. (Unamended) A method as defined in claim 14, further comprising the step of resolving the conflict in accordance with a schema known to the server.

17. (Amended) In a system having one or more server copies of a resource and one or more client copies of a resource, a method for resolving a conflict between a server copy of the resource and a client copy of the resource into a single version of the resource, the method comprising the steps of:

receiving, from a server, a conflict resource at a client; and

executing a client level of conflict resolution between the client copy of the resource and the server copy of the resource at the client in order to resolve the server copy and client copy of the resource into a single version of the resource.

18. (Unamended) A method as defined in claim 17, wherein the conflict resource comprises the server copy of the resource.

19. (Unamended) A method as defined in claim 17, wherein the conflict resource comprises the server copy of the resource and the client copy of the resource.

20. (Unamended) A method as defined in claim 17, wherein the conflict resource comprises a set of differences existing between the server copy of the resource and the client copy of the resource.

21. (Unamended) A method as defined in claim 17, wherein the conflict resource comprises information useful to the client for resolving the conflict.

22. (Unamended) A method as defined in claim 17, further comprising the step of detecting a conflict by a server.

23. (Unamended) A method as defined in claim 17, further comprising the step of detecting a conflict by comparing a client resource tag with a server resource tag, wherein the client resource tag is representative of a version of the

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

client copy of the resource and the server resource tag is representative of a version of the server copy of the resource and a conflict is detected if the client resource tag and the server resource tag do not match.

24. (Unamended) A method as defined in claim 17, further comprising the step of executing a server level of conflict resolution.

25. (Unamended) A method as defined in claim 24, wherein the step of executing a server level of conflict resolution further comprises the step of resolving the conflict.

26. (Unamended) A method as defined in claim 17, wherein the step of executing a client level of conflict resolution further comprises the step of resolving the conflict in accordance with a schema known to the client.

27. (Unamended) A method as defined in claim 17, wherein the step of executing a client level of conflict resolution further comprises the step of comparing the changes made to the client copy of the resource and the server copy of the resource.

28. (Unamended) A method as defined in claim 17, wherein the step of executing a client level of conflict resolution further comprises the step of uploading the resolved conflict resource to the server.

29. (Unamended) A method as defined in claim 28, further comprising the step of returning to the client a new resource tag, wherein the new resource tag identified the current version of the server copy of the resource and the client version of the resource.

30. (Amended) In a system capable of replicating resources from one or more servers to one or more clients, a method for resolving a conflict, the method comprising the steps of:

detecting the conflict, wherein detecting the conflict comprises the steps of:

transmitting a client resource tag to a server;

comparing, by the server, the client resource tag with a server resource tag; and

determining that there is a conflict between a client copy of a resource and a server copy of the resource if the client resource tag does not match the server resource tag; and

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

executing one or more levels of conflict resolution until the conflict is resolved into a single version of the resource.

31. (Unamended) A method as defined in claim 30, wherein a first level of conflict resolution is a server level of conflict resolution, a second level of conflict resolution is a client level of conflict resolution and a third level of conflict resolution requires an end user to resolve the conflict.

32. (Unamended) A method as defined in claim 31, wherein the step of executing one or more levels further comprises the step of executing the server level of conflict resolution at the server.

33. (Unamended) A method as defined in claim 31, wherein the step of executing one or more levels further comprises the step of executing the client level of conflict resolution at the client.

34. (Amended) A method as defined in claim 31, wherein the step of executing one or more levels further comprises the step of executing the third level of conflict resolution.

35. (Amended) A method as defined in claim 30, wherein the step of executing one or more levels further comprises the step of resolving the conflict into the single version of the resource.

36. (Unamended) A method as defined in claim 30, wherein the step of executing one or more levels further comprises the step of resolving the conflict in accordance with a schema.

37. (Unamended) A method as defined in claim 36, wherein the schema is known to the server.

38. (Unamended) A method as defined in claim 36, wherein the schema is known to the client.

39. (Unamended) A method as defined in claim 30, wherein the step of executing one or more levels further comprises the steps of uploading the resolved resource to the server and transmitting a new resource tag to the client.

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

40. (Amended) In a system capable of replication a resource from one or more server to one or more clients, a computer program product for a method for detecting and resolving resource conflicts, the computer program product comprising:

a computer readable medium carrying computer executable instructions for implementing the method, wherein the computer executable instructions comprise:

program code means for detecting a resource conflict;

program code means for comparing a client resource tag with a server resource tag, wherein the client resource tag and the server resource tag are representative of a version of the resource;

program code means for resolving the conflict at the server into a single version of the resource;

program code means for creating a conflict resource if the conflict cannot be resolved at the server;

program code means for resolving the conflict at the client into a single version of the resource by evaluating the conflict resource in accordance with a schema known to the client; and

program code means for presenting the conflict resource to an end user for conflict resolution if the client cannot resolve the conflict.

41. (Unamended) A computer program product as in claim 40, wherein the computer executable instructions further comprise program code means for:

uploading the resolved conflict resource to the server; and

providing the client with a new resource tag.

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

42. (Amended) In a system capable or replicating a resource between a client and a server, a computer program product for a method for detecting and resolving a conflict between a client copy of the resource and a server copy of the resource, the computer program product comprising:

a computer readable medium carrying computer executable instructions for implementing the method, wherein the computer executable instructions comprise:

program code means for transmitting a client resource tag to a server;

program code means for comparing, by the server, the client resource tag with a server resource tag;

program code means for determining that there is a conflict between a client copy of a resource and a server copy of the resource if the client resource tag does not match the server resource tag; and

program code means for executing one or more levels of conflict resolution until the conflict is resolved into a single version of the resource.

43. (Amended) A computer program product as in claim 42, wherein the computer executable instructions further comprise program code means for:

executing a server level of conflict resolution to resolve a server copy of a resource and a client copy of a resource having one or more conflicts into a single version of the resource;

executing a client level of conflict resolution to resolve a server copy of a resource and a client copy of a resource having one or more conflicts into a single version of the resource; and

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

executing a third level of conflict resolution to thereby resolve a server copy of a resource and a client copy of a resource having one or more conflicts into a single version of the resource.

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

REMARKS

Applicant and applicant's attorney express appreciation to the Examiner for the courtesies extended during the recent Examiner Interview held on January 17, 2003. The claim amendments made by this paper are consistent with the proposals discussed, and the agreements reached, during the interview.

The Office Action dated November 5, 2002 rejected Claim 15 under 35 U.S.C. 112, first paragraph indicating that "the best mode contemplated by the inventor has not been disclosed". Although Applicants disagree, Claim 15 has been cancelled herein thereby rendering this rejection moot.

The Office Action also rejected the remaining claims (Claims 1-14 and 16-43) under 35 U.S.C. 103(a) as being unpatentable over Ecklund (U.S. Pat. No. 4,853,843) in view of one or more other references.

Ecklund teaches a "system for merging virtual partitions of a distributed database" (see title). Each virtual partition "is a collection of sites that have access to a copy of the database and which can still communicate with each other" (Col. 2, lines 28-30). Such virtual partitions may be the result of some "system component failure" (Col. 2, line 26). "Each virtual partition independently executes group updates, each group update carrying out at least one or a set of operations with respect to a group of objects referenced by a configuration specification" (Col. 3, lines 16-19). "Each virtual partition maintains a separate change list describing all group updates that it executes" (Col. 3, lines 22-24).

Once the system failure that resulted in the virtual partition is corrected, the databases are merged. "To form the merged database, a virtual partition first obtains the change lists maintained by the separate virtual partitions. The partition then selects a collection of group updates from among all group updates described by the change lists" (Col. 3, lines 32-36) "subject to a restriction that the collection cannot include group updates described by different change lists of the separate virtual partitions when the group updates alter the same data object path" (Col. 3, lines 39-42). In other words, conflicting updates are not included in the collection. "The resolution algorithm manages group update conflicts by . . . resolving conflicting updates by **creating alternate versions**" (Col. 43, lines 65-68, emphasis added). Accordingly, Ecklund appears to resolve conflicts by storing both versions, a primary and an alternate version.

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

In contrast, Claim 1 (as amended herein) recites a method resolving a resource conflict in a system capable of replicating a server copy of a resource stored on one or more servers with a client copy of the resource stored on one or more clients. The method includes a server detecting that the resource on the server conflicts with the copy of the resource on a client, determining whether the server can resolve the conflict between the resource and the copy of the resource into a single version of the resource, and creating a conflict resource if the conflict cannot be resolved at the server. The client evaluates whether the conflict resource can be resolved into a single version of the resource in accordance with a schema of the client if the conflict was not resolved at the server. The user is then presented with the conflict resource conflict resource cannot be resolved by the client.

During the Examiner Interview, the Examiner agreed that Claim 1 appeared to be patentable over the cited art of reference, but that a further review of the rejection and the cited art would be required. In addition, the Examiner stated, an updated search would be required. Similar amendments have been made to the other remaining independent claims as were made to Claim 1. Ecklund does not teach the features of these other independent Claims for the same reasons that it does not teach the features of these other independent claims. Likewise, the other secondary references used to complete the 35 U.S.C. 103(a) do not teach or suggest all of the features of the independent claims that Ecklund does not teach. Accordingly, all of the independent claims are patentable over the combination of Ecklund and the other cited references. Accordingly, the pending claims are allowable and in patentable form. Favorable action is therefore requested.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

Dated this 21th day of January, 2003.

Respectfully submitted,

ADRIAN J. LEE
Attorney for Applicant
Registration No. 42,785

022913

PATENT TRADEMARK OFFICE

W:\13768\119\DS0000000209V001.DOC

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

VERSION WITH MARKINGS TO SHOW CHANGES MADE
(09/412,738)

In the claims:

1. (Amended) In a system capable of replicating a server copy of a resource stored on one or more servers with a client copy of the resource stored on one or more clients, a method for resolving a resource conflict comprising the steps of:

detecting, by the server, that the resource on the server conflicts with the copy of the resource on a client;

determining, at the server, whether the server can resolve the conflict between the resource and the copy of the resource [can be resolved] into a single version of the resource;

creating, by the server, a conflict resource, if the conflict cannot be resolved at the server;

evaluating, at the client, whether the conflict resource can be resolved into a single version of the resource in accordance with a schema of the client if the conflict was not resolved at the server; and

presenting the conflict resource to a user if the conflict resource cannot be resolved by the client.

10. (Amended) In a system having multiple copies of a resource, a method for detecting and resolving a conflict between a client copy of the resource and a server copy of the resource, the method comprising the steps of:

receiving, from the client, a client resource tag at the server, wherein the client resource tag identifies a client version of the client copy of the resource;

determining, by the server, whether the client resource tag matches the server resource tag, wherein the server resource tag identifies a server version of the server copy of the resource;

determining that a conflict exists if the client resource tag does not match the server resource tag; and

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

VERSION [redacted]TH MARKINGS TO SHOW CHAN[redacted]ES MADE
(09/412,738)

executing a server level of conflict resolution between the client copy of the resource and the server copy of the resource at the server in order to resolve the server copy and client copy of the resource into a single version of the resource.

17. (Amended) In a system having one or more server copies of a resource and one or more client copies of a resource, a method for resolving a conflict between a server copy of the resource and a client copy of the resource into a single version of the resource, the method comprising the steps of:

receiving, from a server, a conflict resource at a client; and

executing a client level of conflict resolution between the client copy of the resource and the server copy of the resource at the client in order to resolve the server copy and client copy of the resource into a single version of the resource.

30. (Amended) In a system capable of replicating resources from one or more servers to one or more clients, a method for resolving a conflict, the method comprising the steps of:

detecting the conflict, wherein detecting the conflict comprises the steps of:

transmitting a client resource tag to a server;

comparing, by the server, the client resource tag with a server resource tag; and

determining that there is a conflict between a client copy of a resource and a server copy of the resource if the client resource tag does not match the server resource tag; and

executing one or more levels of conflict resolution until the conflict is resolved into a single version of the resource.

34. (Amended) A method as defined in claim 31, wherein the step of executing one or more levels further comprises the step of executing [a] the third level of conflict resolution.

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

VERSION [redacted]TH MARKINGS TO SHOW CHAN[redacted]ES MADE
(09/412,738)

35. (Amended) A method as defined in claim 30, wherein the step of executing one or more levels further comprises the step of resolving the conflict into the single version of the resource.

40. (Amended) In a system capable of replication a resource from one or more server to one or more clients, a computer program product for a method for detecting and resolving resource conflicts, the computer program product comprising:

a computer readable medium carrying computer executable instructions for implementing the method, wherein the computer executable instructions comprise:

program code means for detecting a resource conflict;

program code means for comparing a client resource tag with a server resource tag, wherein the client resource tag and the server resource tag are representative of a version of the resource;

program code means for resolving the conflict at the server into a single version of the resource;

program code means for creating a conflict resource if the conflict cannot be resolved at the server;

program code means for resolving the conflict at the client into a single version of the resource by evaluating the conflict resource in accordance with a schema known to the client; and

program code means for presenting the conflict resource to an end user for conflict resolution if the client cannot resolve the conflict.

42. (Amended) In a system capable or replicating a resource between a client and a server, a computer program product for a method for detecting and resolving a conflict between a client copy of the resource and a server copy of the resource, the computer program product comprising:

a computer readable medium carrying computer executable instructions for implementing the method, wherein the computer executable instructions comprise:

program code means for transmitting a client resource tag to a server;

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

VERSION WITH MARKINGS TO SHOW CHANGES MADE
(09/412,738)

program code means for comparing, by the server, the client resource tag with a server resource tag;

program code means for determining that there is a conflict between a client copy of a resource and a server copy of the resource if the client resource tag does not match the server resource tag; and

program code means for executing one or more levels of conflict resolution until the conflict is resolved into a single version of the resource.

43. (Amended) A computer program product as in claim 42, wherein the computer executable instructions further comprise program code means for:

executing a server level of conflict resolution to resolve a server copy of a resource and a client copy of a resource having one or more conflicts into a single version of the resource;

executing a client level of conflict resolution to resolve a server copy of a resource and a client copy of a resource having one or more conflicts into a single version of the resource; and

executing a third level of conflict resolution to thereby resolve a server copy of a resource and a client copy of a resource having one or more conflicts into a single version of the resource.

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

EXHIBIT D

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]

P.01

TRANSACTION REPORT

JAN-21-03 TUE 02:48 PM

DATE START	RECEIVER	TX TIME	PAGES	TYPE	NOTE	M#	DP
JAN-21 02:41 PM	##77537#	6'46"	20	SEND	OK	664	

TOTAL : 6M 46S PAGES: 20

WORKMAN, NYDEGGER & SEELEY
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111
TELEPHONE (801) 533-9800
FAX (801) 328-1707

TELECOPIER COVER SHEET

January 21, 2003

Total Number of Pages
(including cover letter): 20

Please deliver the transmitted facsimile pages to:

EXAMINER DUSTIN NGUYEN

Business Phone (703) 305-5321

Telecopier Phone: (703) 746-8709

Received from < 18013281707 > at 7/3/03 12:14:24 AM [Eastern Daylight Time]